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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/634,276	08/05/2003		Andreas Fath	071308.0463	7127	
31625	7590	11/16/2005	•	EXAM	EXAMINER	
BAKER BO			KIM, CHRISTOPHER S			
PATENT DE			ART UNIT	PAPER NUMBER		
98 SAN JACINTO BLVD., SUITE 1500 AUSTIN, TX 78701-4039				3752		

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)					
Office Action Comments	10/634,276	FATH ET AL.					
Office Action Summary	Examiner	Art Unit					
	Christopher S. Kim	3752					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)⊠ Responsive to communication(s) filed on 26.5	September 2005.						
	s action is non-final.						
3) Since this application is in condition for allowa		secution as to the merits is					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1,3-6 and 8-10</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1,3-6 and 8-10</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9)☐ The specification is objected to by the Examiner.							
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)⊠ All b)□ Some * c)□ None of:							
<u> </u>	1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
Notice of References Cited (PTO-892)	4) Interview Summary						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite atent Application (PTO-152)					
<ul> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ul>	6) Other:	aton Application (1 10-102)					

#### **DETAILED ACTION**

## Continued Examination Under 37 CFR 1.114

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 18, 2005 has been entered.
- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

# Claim Rejections - 35 USC § 102

3. Claims 1, 3-6, 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Hofmann et al. (WO 99/30028).

Hofmann discloses a fuel injection valve comprising: a nozzle body 30; a nozzle needle 10; conical nozzle needle tip 12; frusto-conical body section 51.

4. Claims 1, 3-6, 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Ushimura (4,470,548).

Ushimura discloses a fuel injection valve comprising: a nozzle body 14; a nozzle needle 12; conical nozzle needle tip 40; frusto-conical body section 36.

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5. Claims 1, 3-6, 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Holzgrefe (4,982,901).

Holzgrefe discloses a fuel injection valve comprising: a nozzle body 15; a nozzle needle 6; conical nozzle needle tip 21; frusto-conical body section 20.

6. Claims 1, 3-6, 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Holzgrefe et al. (5,012,981).

Holzgrefe discloses a fuel injection valve comprising: a nozzle body 15; a nozzle needle 6; conical nozzle needle tip 21; frusto-conical body section 20.

## Response to Arguments

7. Applicant's arguments filed August 12, 2005 have been fully considered but they are not persuasive.

Applicant argues that the prior art does not disclose "the gap is implemented as an elongated recess between the nozzle needle and the nozzle body." Applicant's argument is not convincing. Each of the prior art shows a gap between the nozzle needle and the nozzle body. The gap exists when the nozzle needle is seated on the nozzle body. The gap is elongated because it is a passageway and it is by definition recessed because it exists when the nozzle needle and the nozzle body are in contact with one another.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. Kim whose telephone number is (571) 272-4905. The examiner can normally be reached on Monday - Thursday, 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on (571) 272-4919. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher S. Kim Primary Examiner Art Unit 3752